



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Clive Tang

Serial No.: 09/901,988

Group Art Unit: 2611

Filed: July 10, 2001

Atty. Docket No.: 059864.00660

For: APPARATUS, AND ASSOCIATED METHOD, FOR SELECTING A SWITCHING THRESHOLD FOR A TRANSMITTER UTILIZING ADAPTIVE MODULATION TECHNIQUES

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

April 10, 2007

Sir:

In accordance with the Pre-Appeal Brief Conference Pilot Program guidelines set forth in the July 12, 2005 Official Gazette Notice, Applicant hereby submits this Pre-Appeal Brief Request for Review of the final rejections of claims 1-11 and 13-23 in the above identified application. Claims 1-11 and 13-23 were finally rejected in the Office Action dated October 17, 2006. Applicant filed a Response to the Final Office Action on January 17, 2007, and the Office issued an Advisory Action dated February 13, 2007 maintaining the final rejections of claims 1-11 and 13-23. Applicant hereby appeals these rejections and submits this Pre-Appeal Brief Request for Review. A Notice of Appeal is filed timely concurrently herewith. This Pre-Appeal Brief Request for Review is being timely filed. As will be discussed below, numerous clear errors exist in the final rejections that require withdrawal thereof.

Claims 1-11, 16-17 and 22-23 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,452,964 to Yoshida (hereinafter Yoshida). Claims 16-17 and 22-23 were also rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,198,734 to Edwards (hereinafter Edwards). As outlined below, Yoshida and/or Edwards fails to disclose or

suggest the elements of claims 1-11 and 13-23. The failure of Yoshida and/or Edwards to disclose each and every element of the present claims constitutes clear error.

Yoshida discloses an adaptive modulator/encoder 104 of a transmitter in station A that executes encoding and modulation processes corresponding to a plurality of modulation levels. A modulation level decision unit 105 of the transmitter decides the modulation level of a signal to be transmitted, based on both an average received power reported from a received power measurement unit of a receiver and a threshold at each modulation level, and reports it to a data selector 106 of the transmitter in station A. The data selector 106 selects a modulation signal among modulation signals at each of the modulation levels outputted from the adaptive modulator/encoder which corresponds to the modulation level reported from the decision unit, and transmits it to a correlation channel as a transmitted signal for station B. See Col. 6, lines 4-27.

Yoshida also discloses that first an average carrier-to-noise (CNR) ratio is observed by a receive power measurement unit in each receiver, as the observing operation of an average received power. The observation result is obtained by the decision unit 105 in each transmitter and a modulation level is decided by the decision unit 105 in each transmitter based on a threshold CNR at each modulation level. A control that sets the average transmitted power of a generated signal to a predetermined value is incorporated in each of the dynamically selected modulation methods. See Col. 7, lines 16-Col. 8, line 51.

Edwards discloses a system where a voice/data signal is transmitted across a channel where it is received by a receiving end of a circuit. At the receiving end, the transmitted signal is analyzed to determine the transmission characteristics of the signal. Parameters are accessed and it is determined that the signal quality is varying outside of an acceptable boundary or beyond an acceptable threshold, a feedback signal is transmitted to the transmitter. The transmitter then adapts its scheme of transmission on a sequential basis. See at least Col. 5, lines 6-47.

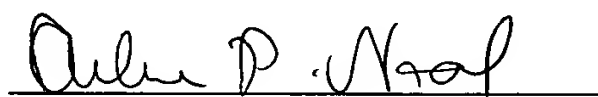
Applicant submits that the rejections of claims 1-11 and 13-23 under 35 U.S.C. 102(e) based on the teachings of Yoshida and/or Edwards is clearly erroneous. Applicant submits that Yoshida and/or Edwards simply does not teach or suggest the combination of elements clearly recited in claims 1-11 and 13-23. Each of claims 1-11 and 13-23 recites a calculator coupled to dynamically select at least a first switching threshold used in selection of a modulation parameter, the first switching threshold changeable responsive to changes in the selected communication indicia, and the first switching threshold selected by said calculator to at least satisfy a first performance criteria and to satisfy at least a second performance criteria. According to the Office Action, Yoshida and Edwards each teaches these features. However, unlike what is alleged by the Office Action, neither Yoshida nor Edwards teaches, for example, dynamically selecting the first switching threshold, the first switching threshold changeable responsive to changes in the selected communication indicia, and the first switching threshold selected by said calculator to at least satisfy a first performance criteria and to satisfy at least a second performance criteria, as recited in the presently pending claims.

Yoshida merely teaches that data selector 106 **selects a modulation signal** among modulation signals at each of the modulation levels based on a threshold CNR at each modulation level. Edwards merely teaches that parameters are accessed to determine if the signal quality is varying outside of an acceptable boundary or beyond an acceptable threshold. There is no teaching or suggestion in Yoshida or Edwards that the calculator **dynamically selects** at least a first switching threshold used in selection of a modulation parameter, the first switching threshold **changeable responsive to changes in the selected communication indicia**, and the first switching threshold selected by said calculator to at least satisfy a first performance criteria and to satisfy at least a second performance criteria, as recited in the presently pending claims. Given the explanations above, Applicant respectfully asserts that the rejections under 35 U.S.C. §102(e) are in clear error and that the rejections should be withdrawn because neither Edwards nor Yoshida, teaches or suggests each feature of claims 1, 16, 22 and 23 and hence, dependent claims 2-11 and 17 thereon.

For all of the above noted reasons, it is strongly submitted that certain clear differences exist between the present invention as claimed in claims 1-11 and 13-23 and the prior art relied upon by the Examiner. It is further submitted that these differences are more than sufficient that the present invention would not have been anticipated or obvious to a person having ordinary skill in the art at the time the invention was made. This final rejection being in clear error, therefore, it is respectfully requested that the Examiner's decision be reversed in this case regarding the rejections of claims 1-11 and 13-23, and indicate the allowability of all of pending claims 1-11 and 13-23.

Reconsideration and withdrawal of the rejections, in view of the clear errors in the Office Action, is respectfully requested. In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



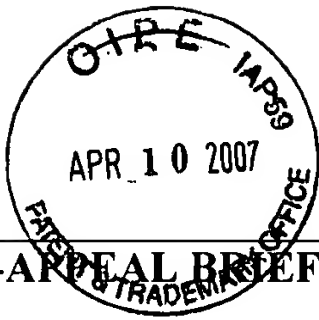
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Enclosures: PTO/SB/33 Form  
Notice of Appeal  
Petition for Extension of Time (3 Month)  
Check No. 16190



PTO/SB/33 (07-05)

United States Patent &amp; Trademark Office; U.S. DEPARTMENT OF COMMERCE

<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>	Docket Number (Optional) 059864.00660
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]  on _____  Signature _____  Typed or printed Name _____	Application Number:  09/901,988  Filed: July 10, 2001
	First Named Inventor:  Clive Tang
	Art Unit: 2611
	Examiner: Temesghen Ghebretinsae

**Mail Stop AF**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a Notice of Appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

- ☐ Applicant/Inventor.
- ☐ assignee of record of the entire interest.  
See 37 CFR 3.71. Statement under  
37 CFR 3.73(b) is enclosed
- ☐ Attorney or agent of record.  
Registration No. \_\_\_\_\_
- ☒ Attorney or agent acting under 37 CFR 1.34.  
Reg. No. is acting under 37 CFR 1.34 43,828

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April 10, 2007  
Date

NOTE: Signatures of all of the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☐ \*Total of \_\_\_\_\_ forms are submitted.